

ELECTRONIC SEMICONDUCTOR POWER DEVICE WITH INTEGRATED DIODE

ABSTRACT OF THE DISCLOSURE

A device including an IGBT a formed on a chip of silicon consisting of a P type substrate with an N type epitaxial layer that contains a first P type region and a termination structure, and having a first P type termination region that surrounds the first region, a first electrode in contact with the first termination region, and a second electrode shaped in the form of a frame close to the edge of the chip and connected to a third electrode in contact with the bottom of the chip. A fourth electrode made in one piece with the first electrode is in contact with the first region. The termination structure also comprises a fifth electrode in contact with the epitaxial layer along a path parallel to the edge of the first termination region and connected to the second electrode and a second P type termination region that surrounds the fifth electrode and a sixth electrode, and which is in contact with the second termination region, connected to the first electrode.

WPN/851063/438-AP